Siwei (Edison) Guo

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EDUCATION

Northeastern University, Seattle, WA   Expected May 2021
Candidate of a Master of Science in Information Systems (GPA: 3.69/4)
Related Courses: *Application Engineering & Development, Program Structures & Algorithms, Data Science Engineering Methods & Tools, Network Structures & Cloud Computing, Operating Systems, Agile Software Development, Smartphones-Based Web Development*

Shanghai University of Electric Power, Shanghai, China   June 2018
Bachelor of Science in Electrical Engineering
Honors: Excellent Student's Scholarship, College of Electrical Engineering
Related Courses: *C language Program Design, Microcomputer Principles, Digital Circuits and Logics*

TECHNICAL KNOWLEDGE

Language: Java, C/C++, JavaScript, Python **Front End:** ReactJS, HTML, CSS, Bootstrap **Back End:** Spring Boot, Node.JS, Express.JS, Django, Apache Tomcat **Database:** MySQL, MongoDB, MongoDB Atlas, PostgreSQL, Redis, H2, AWS DynamoDB, SQLite **Cloud Computing:** AWS Elastic Beanstalk, AWS EC2, AWS Lambda, AWS Step Functions **Tools:** Docker, Git, JSON, GraphQL, Pandas

WORK EXPERIENCE

Software Engineer Intern, MF Education Technology, Shanghai, China   March 2018 - November 2018
- Worked with **C++** on different **Linux** distributions to build robust robots and electronic products
- Developed **Android applications** for the electronic products with the development team
- Debugged for C++ code, tested the electronic systems, and wrote detailed documentation for the products

Software Engineer Intern, Fujian IoT Scientific Research Institute, Fujian, China   July 2017 - September 2017
- Worked with **Java** on **Linux** operating system to develop **Apache Tomcat** web server in back end team
- Designed and built the back end of Drip Feeding System Project for hospitals with the development team
- Contributed to the team by writing source code and documentation, and used **GitHub** for version control

RESEARCH & PROJECT EXPERIENCE

Full Stack Project: Todo Web Application
- Built the front end with **ReactJS**, **HTML**, **CSS** and **Bootstrap**, the back end with **Java** and **Spring Boot**
- Integrated the back end with **H2** database, secured user data with **Basic Auth** and **JSON Web Token(JWT)**
- Hosted and maintained the web application on **AWS Elastic Beanstalk**

Full Stack Project: Bookcase - Library Management System
- Developed the front end with **React.JS**, **HTML**, **CSS**, and back end with **Node.JS** and **Express.JS**
- Connected the back end with **MongoDB Atlas**, modeled and fetched the data with **Mongoose**
- Worked with **GraphQL** to send and load data in a modern way to bridge the back end and the front end

Back-end Project: Blackboard - Learning Management System REST APIs
- Used **Java** and **Spring Boot** to build REST APIs to post, query, delete, and update learning information
- Stored all the data in **AWS DynamoDB** and deployed the web application on **AWS Elastic Beanstalk**
- Implemented serverless APIs with **AWS Lambda**, **AWS Step Functions**, and **AWS API Gateway**

Back-end Project: Blog Django Web Application
- Focused on the back end and built the REST APIs for blog management system with **Python** and **Django**
- Linked the back end with **SQLite**, modeled and migrated the data to the database with embedded APIs
- Coded the front end with basic **HTML** and made the application have basic blog functionalities

Front-end Project: Meme Generator
- Learned to create user interface for web applications with **HTML**, **CSS**, **JavaScript** and **React.JS**
- Fetched pictures randomly from imgflip.com image API
- Gained an understanding of the state management and life cycle behind React.JS